

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-087029

(43)Date of publication of application : 28.03.2000

---

(51)Int.Cl. C09K 11/08  
C03C 17/25  
C09K 11/56  
H05B 33/10  
H05B 33/14  
H05B 33/26

---

(21)Application number : 11-156682

(71)Applicant : PLANAR SYST INC

(22)Date of filing : 03.06.1999

(72)Inventor : HAERKOENEN GITTE  
KERVINEN TOMI  
SOININEN ERKKI  
TORNQUIST RUNAR  
VASAMA KIRSI  
GLANZ MARIO  
SCHUMANN HERBERT

---

(30)Priority

Priority number : 98 981262 Priority date : 03.06.1998 Priority country : FI

---

## (54) GROWING OF THIN FILM ELECTROLUMINESCENCE STRUCTURE

(57)Abstract:

PROBLEM TO BE SOLVED: To grow an SrS phosphor layer doped, with cerium by an atomic layer epitaxy method, exhibiting improved uniformity of luminance by employing, as a precursor of a cerium dopant an organic metal cerium compound containing a cyclopentadienyl type ligand.

SOLUTION: There is employed an organic metal cerium compound containing at least one cyclopentadienyl type ligand, preferably a compound represented by the formula:  $CeCp_nR_{3-n}$ . In the formula, R is hydrocarbyl; (n) is 1-3; Cp is the formula:  $C_5R_1xR_2yH_5-z$ ; (x) and (y) are each 1-5;  $x+y$  is (z) and  $z \leq 5$ ; and  $R_1-2$  are each a lower alkyl. Preferably, a Ce precursor is one comprising a compound selected from tricyclopentadienyl derivatives and alkyl-substituted tricyclopentadienyl derivatives of cerium, and further preferably one selected from tetramethyl- and isopropyl-substituted Ce-tricyclopentadienyl compounds.

---

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]